



Chambers's Journal

SIXTH SERIES.

ABOUT SHELLEY'S EDINBURGH MARRIAGE. A DISCOVERY.

THE other day Sir Henry D. Littlejohn, Medical Officer of Health for Edinburgh, called on the Editor of this *Journal* and made the announcement that while Mr James G. Ferguson, city session clerk, had, for quite another purpose, been looking over a volume stored in the city archives, he had stumbled upon the original certificate of residence necessary for the marriage of Percy Bysshe Shelley with Harriet Westbrook, signed by the poet and two witnesses he brought with him. As this seemed both an important and interesting discovery, and one that had hitherto escaped the notice of the poet's very numerous biographers, further research was made, sufficient to warrant the presenting anew of this romantic incident which was to darken down into tragedy.

The result of this inquiry is now before the reader. The entry quoted in Professor Dowden's Life, from the record in the Register-House, is shorter than the more extended certificate just unearthed by Mr Ferguson, which bears the abbreviation 'Ent^a' at the foot in a clerk's handwriting. The latter certificate is manifestly only the initial step for the proclamation of banns. The small quarto book containing the entry, belonging to the session clerk of the City Parish, measures eight and a quarter by six and a half inches, and is three-fourths filled with a register of similar certificates for the marriage of soldiers, carters, smiths, and labourers; and, by turning it upside down and beginning at the other end, the book has been used for recording baptisms, which meet the marriages about page 153.

For the better understanding of Shelley's Edinburgh marriage it may be necessary to recall the incidents immediately preceding what Dr Garnett calls 'the weakest action of his life' and 'the greatest misfortune of his life'; but which Mrs Oliphant, recognising that under the wildness of his strange nature dwelt the soul of a true and knightly gentleman, with perhaps truer insight

in regard—at least—only to the feelings that prompted it, calls 'the finest thing in Shelley's life.' Shelley matriculated at University College, Oxford, 10th April 1810; and, like Gibbon, he was shocked at the neglect of learning and discipline amongst the students, and the drunkenness and uproar in the evening. Here he met his first and best-abused biographer, Thomas Jefferson Hogg, who gives by far the most interesting narrative of the poet's early days. This is how he appeared to Hogg when they first met: 'His figure was slight and fragile, and yet his bones and joints were large and strong. He was tall, yet he stooped so much that he seemed of a low stature. His clothes were expensive, and made according to the most approved mode of the day; but they were tumbled, crumpled, unbrushed. His gestures were abrupt, and sometimes violent, occasionally even awkward, yet more frequently gentle and graceful. His complexion was delicate, and almost feminine, of the purest red and white; yet he was tanned and freckled by exposure to the sun, having passed the autumn, as he said, in shooting. His features, his whole face, and particularly his head, were, in fact, unusually small; yet the last *appeared* of a remarkable bulk, for his hair was long and bushy, and in fits of absence and in the agonies of anxious thought he often rubbed it fiercely with his hands, or passed his fingers quickly through his locks unconsciously, so that it was singularly wild and rough. . . . His features were not symmetrical, yet was the effect of the whole extremely powerful. They breathed an animation, a fire, an enthusiasm, a vivid and preternatural intelligence, that I never met with in any other countenance. Nor was the moral expression less beautiful than the intellectual.' But the voice, we are further told, was disappointing, being shrill, harsh, and discordant.

The issue of a prose pamphlet in praise of atheism, or what Mr W. M. Rossetti terms pantheism, led to his expulsion from Oxford, which he

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left on 26th March 1811. To be thus cut adrift at eighteen and a half, with such impulses and wild political and social notions, was the beginning of his misfortunes. Sir Timothy Shelley, his father, cut off his allowance, although his mother and sisters, who befriended and helped him, would fain have welcomed Shelley back to their home at Field Place, near Horsham. In May he had come to terms with his father, and an allowance of two hundred pounds a year was promised. Percy's sisters had made the acquaintance at their school at Clapham of Harriet Westbrook, daughter of a retired coffee-house keeper, then aged sixteen. It is said she possessed neither strength of intellect nor strength of character; and young Percy, to whom she had been introduced, seems to have gradually gained her over to his views and opinions. There had been half a year of acquaintanceship at least before the crisis came. Harriet believed she was persecuted at school; when she left she wrote letter after letter to Shelley, then on holiday in Wales, complaining of oppression, lamenting that her father was forcing her back to school, and threatening to commit suicide. Shelley hastened to London to cheer up the woe-begone maiden, about whom he said that 'she would fly with me, and throw herself on my protection. Gratitude and admiration all demand I should love her for ever.' Under this feeling of compassion, and embittered at rejection by his own cousin, Harriet Grove, he took the irrevocable step of travelling to Scotland and being married in Edinburgh. Hogg says: 'To be always in a hurry was Shelley's first rule of conduct; and the next, to make a mystery of a fact patent to everybody.' The hurry here is very apparent, and some of the mystery is at last dispelled after lying hidden in the Council Chambers of Edinburgh for about ninety years. Shelley closed a letter to his cousin with the enigmatical words:

Hear it not, Percy, for it is a knell,
Which summons thee to heaven or to hell.

In personal appearance Harriet Westbrook was at this time 'all youthful freshness, fairness, bloom; short of stature, slightly and delicately formed; light of foot and graceful in her movements, with features regular and well proportioned—the tint of the blush-rose shining through the lily.' We may add that her hair was light-brown, and her laugh spontaneous, hearty, and joyous. Shelley wrote of her: 'The ease and simplicity of her habits, the unassuming plainness of her address, the uncalculated connection of her thought and speech, have ever formed in my eyes her greatest charms.' Hogg wrote: 'If it was agreeable to listen to her, it was not less agreeable to look at her; she was always pretty, always bright, always blooming; without a spot, without a wrinkle, not a hair out of its place.' Of this escapade Mrs Oliphant re-

marks that they had between them as much knowledge of the world as two babies, two hundred pounds a year, and the displeasure and alienation of all their friends. Such was the condition of the poet and Harriet Westbrook on their arrival in Edinburgh on that autumn day.

The following is the entry as it stands in the Parochial Register in the Register-House, Edinburgh, under date 28th August 1811, in the regular Register of Proclamations. Whether the marriage was celebrated by a minister afterwards cannot be inferred one way or another from the register:

'Percy Bysshe Shelley, Farmer, Sussex, and Miss Harriet Westbrook, St Andrew's Church Parish, daughter of Mr John Westbrook, London.'

The following is the entry in the volume now just discovered. The year 1811 stands at the top of the page, and the month is August:

'28.

'Mr Percy Bysshe Shelley, Farmer, Sussex, and Miss Harriet Westbrook, St Andrew's Parish, Daughter of Mr John Westbrook, London. That the parties are free, unmarried (*sic*), of legal Age, not within the forbidden Degrees, and she has resided in Edinburgh upwards of Six Weeks is certified by Mr Patrick Murray, Teacher, and Mr Wm. Cumming, Hostler, both of Edinburgh, and the Bridegroom.

Ent^d



WILL^M. CUMMING.

PATR. MURRAY' (*sic*).

It will be seen that the entry in the Register of Proclamations which Professor Dowden examined is practically a transcript of the first three lines of the entry in the volume brought to light by Mr Ferguson, the word 'Church' being inserted and the spelling of 'Harriet' corrected.

What value, we may ask, has either of these entries as a marriage certificate? The former is simply an entry of proclamation of banns; the latter, according to Mr Ferguson, is but the usual preliminary announcement that was prepared for proclamation of banns. Did the Scottish advocate with whom Shelley travelled north in the mail-coach advise him thus, and did the poet only take the first step towards a regular marriage and stop there? Such an intimation has no meaning save as a preliminary to a regular marriage—that is, by a minister. Thomas Jefferson Hogg, who came on to Edinburgh at Shelley's heels from York in the first week of September, says on this point: 'Shelley and his future [bride] had travelled from London to Edinburgh by the mail, without stopping. A young Scotch advocate was their companion in the coach for part of the way; he was an agreeable, obliging

person. Shelley confided to him the object of his journey, and asked his advice. The young lawyer told the young poet how to get married. They followed his directions, and were married on their arrival in Edinburgh—how, or where, I never heard. *Harriet had some marriage lines*, which she sent to her father; I never saw them.' One would like to know whether the marriage lines referred to were merely a duplicate of this or of the Register-House entry.

If we overlook the fact that Shelley was pleased to call himself a 'farmer,' it is evident that Harriet Westbrook, who had probably only arrived in Edinburgh on the previous day—the 27th—had not resided in St Andrew's Parish, in which their lodging in George Street was situated, for the required period; it is manifestly untrue that she had resided in Edinburgh for six weeks. Shelley was in Sussex on 19th August, and according to Professor Dowden they came north on Saturday night, 24th August, or Sunday night, the 25th. Are we to thank the unnamed and still unknown Scottish advocate or his landlord for the adoption of this fiction?

Professor Dowden, followed by the *Dictionary of National Biography* and other authorities, accept this Register-House entry as the date of Shelley's Edinburgh marriage, although, as we have hinted, it seems to be only the usual announcement for proclamation of banns. There is no notice either in the *Courant, Mercury, or Scots Magazine* of that or a closely subsequent date that the marriage was publicly celebrated. The only other marriage notified on 28th August in the register is to be found in the newspapers of the period.

The two householders who signed their names to the document have their apparent counterparts in the Edinburgh Directory for 1811. In this year there was a William Cumming who kept furnished lodgings at 60 George Street. This same gentleman seems to have moved about a good deal, as he was in 27 George Street in 1810, and at No. 13 in 1816. He may or may not be the same William Cumming, and the possible renumbering of a partly inhabited street may account for something. There is less doubt about Patrick Murray, teacher, whose name appears against 4 St Mary Wynd in 1810; next year—the year of the marriage—there is a Peter (evidently a mistake for Patrick) Murray, teacher, St Mary Wynd, who is notified as having furnished lodgings at 1 George Street. It is within the bounds of possibility that he or Cumming was Shelley's landlord. Hogg says: 'I soon set foot in George Street, a spacious, noble, well-built street; but a deserted street, or rather a street which people have not yet come fully to inhabit. I soon found the number indicated at the Post-Office; I have forgotten it, but it was on the left side—the side next to Princes Street.' It was here that Shelley arrived probably on the forenoon of 27th August, having left London on the previous Saturday

night; the poet asked the good-humoured landlord if he would take them in, and advance them money to get married, until supplies arrived. To this the landlord assented, if Shelley would treat himself and friends to a supper in honour of the wedding. 'All things,' says Professor Dowden, 'were easily arranged and satisfactorily accomplished.' The supper came off, but Shelley and his bride preferred to be alone. Towards the close of the evening the landlord and his friends broke in upon their quiet felicity, the host wishing, according to ancient custom, to anoint the bride with whisky. Shelley, oblivious to the fact of indebtedness, immediately caught up a brace of pistols, and, pointing them at his host, said, 'I have had enough of your impertinence; if you give me any more of it I will blow your brains out.' The servant, Christie, who spoke the broadest Scotch dialect, was a torture to Shelley, and he would groan, 'Send her away, Harriet. Oh! send her away. For God's sake send her away!' It was one of Hogg's pleasantries to encourage the maiden to speak when waiting upon them. Hence Shelley's disgust.

Thomas Jefferson Hogg had been in York when the following note, received from Shelley, and written as the coach passed through at midnight, decided him to follow the poet at once to Edinburgh. This is the hasty note:

'MY DEAREST FRIEND,—Direct to the Edinburgh Post-Office—my own name. I passed to-night with the mail. Harriet is with me. We are in slight pecuniary distress. We shall have £75 on Sunday; until then can you send £10? Divide it in two.
—Yours,

PERCY SHELLEY.'

Sir Timothy Shelley, his angry and outraged father, never sent this expected Sunday remittance, probably an instalment of the two hundred pounds a year which he had settled on his scapegrace son. 'God only knows,' he wrote from Field Place to Hogg's father, 'what will be the end of all this disobedience.' But an uncle, Captain Pilfold, came to the rescue; he wrote to Shelley kindly, cheery letters, and also furnished him with money.

It might be easy, did space permit, to follow Hogg's discursive and entertaining account of their Edinburgh residence in George Street, until they all left for England six weeks later. We can only indicate a few of the features. They visited the 'beggarly palace' of Holyrood together; while the poet went home to write letters, Hogg conducted Harriet to the top of Arthur's Seat, and was much more impressed by the fine view than by anything he had seen at Holyrood, and felt 'one ought never to quit so lovely a scene.' 'Let us sit down,' he said to Harriet; 'probably when he has finished writing he will come to us.' But Shelley did not come that day, and Hogg dragged the unwilling Harriet from the top of the hill homewards. Hogg had had no proper dinner for two days, so the view palled upon him

sooner than on Harriet. They enjoyed the Scotch shortbread and honey, of which the poet ate large quantities, although at that time he was careless and Spartan in regard to food. Shelley's habit was to go before breakfast to the Post-Office for letters, of which he received a great number. On Sundays they criticised and smiled at the sober church-goers, and even found themselves one day at a service. 'I never saw Shelley,' says Hogg, 'so dejected, so desponding, so despairing; he looked like the picture of perfect wretchedness; the poor fellow sighed piteously as if his heart would break.' It must have been the city church they attended, for they were pushed aside in retiring to make way for the Lord Provost and the 'Bellies,' as Hogg believed them to be called. They discussed on the homeward journey the advantages of a ritual, and the comfortless, 'inhuman church music.' They even attended a catechising, when the question 'Wha's the De'il?' is said to have sent Shelley with a shrieking laugh outside the door.

Surely the Edinburgh advocate already mentioned must have given Shelley an introduction to the Advocates' Library, as he used to return home laden with books; some of them were French works, including Buffon, which the poet started to translate. *Claire d'Albe*, by Madame Cottin, was read by Harriet, and translated by her from the French; in this way her mornings were employed. Hogg thought the poet's bride had been well educated at the Clapham school. She was moderately proficient in music, and very fond of reading; but he never once saw a Bible, Prayer-book, or any devotional work in her hand; nor did he ever hear her say a syllable on the subject of religion. She was fond of reading aloud, and did so in a clear, distinct, agreeable voice, while Shelley would frequently drop off to sleep.

Shelley's first visit to Edinburgh was not well timed in order to see many of the notables. Scott, who had seen Burns in his own boyhood, and afterwards knew Byron and the Lake Poets, was absent from his town house in Castle Street, and much engrossed for the time being with the recent purchase of Abbotsford. At this time also Scott had just written to another poet friend, John Leyden, who died at Batavia on the very day of Shelley's appearance before the registrar of the City Parish. Lord Jeffrey, about whom and his *Edinburgh Review* Hogg alleged he had heard only too much while coming north in the mail-coach, and who then resided at 92 George Street, was also out of town.

The weather during their visit was warm and fine; no rain fell all the time; and the famous comet of 1811 was then visible, and was watched from Princes Street. But the romance of Edinburgh never seems to have laid its spell on Shelley. Later, when in York, Hogg remarked that Harriet's beauty attracted all beholders. 'Her charms did not appear to be equally capti-

vating in the northern Metropolis; I went abroad with her there more frequently, but nobody ever noticed her; she was short, and slightly and delicately formed; not raw-boned enough for the Scottish market.' The Shelleys were in Edinburgh three years later; this time they lodged at 36 Frederick Street. Mr Rossetti alleges that Shelley, now of age, married again in an Episcopal church in Edinburgh. Professor Dowden doubts this, and thinks that the motive of this second visit was to escape the pressure of creditors. On this occasion Shelley made the acquaintance of a Brazilian student, Baptista, studying medicine at Edinburgh University.

We need hardly follow the unhappy story further. Holding as he did that marriage was a relation between man and woman to be assumed at joint option, and terminated at the option of either party, it is not surprising to find that Shelley, separated from Harriet by 'incurable dissensions' or 'radical incompatibility of temperament,' took flight to the Continent with Mary Godwin on the 28th of July 1814. Miss Clairmont, daughter of Godwin's second wife, accompanied them. Charges have been made against Harriet's honour which have never been proved; neither did Shelley succeed in securing the custody of Ianthe and Charles, his two children by her. On 10th December 1816 the body of Harriet was found in the Serpentine; and before the year closed, being free to make Mary Godwin his lawful wife, he married her on 30th December 1816. Robert Southey in 1820, writing to Shelley at Pisa, spoke very plainly regarding his conduct to Harriet Westbrook: 'Ask your own heart whether you have not been the whole, sole, and direct cause of her destruction. You corrupted her opinions; you robbed her of her moral and religious principles; you debauched her mind; but for you and your lessons she might have gone through the world innocently and happily.' Less than a year later the poet perished with Williams in an open boat near Via Reggio in Italy.

Many of Shelley's biographers, including D. F. McCarthy, and Jeaffreson in his *Real Shelley*, give the beginning of September 1811 as the date of the Edinburgh marriage. His remarriage to Harriet Westbrook took place in London three years later, 24th March 1814, in order, as the certificate says, 'to obviate all doubts that have arisen, or shall, or may arise, touching or concerning the validity of the aforesaid marriage.' In regard to a public or regular Scotch marriage at that time two requisites were necessary: first, due proclamation of banns, and, secondly, celebration by a minister of religion. Shelley may have taken the first step in a regular marriage, but it is plain he did not go further. By Act 8, Assembly 1784, session clerks were prohibited from proclaiming parties until the leave of the minister had been obtained. Further, they could not pro-

claim banns until the parties had resided six weeks in the parish; otherwise they had to be proclaimed in the church of the parish where their ordinary residence was. If the session clerk did not know that they had been resident for six weeks in the parish, or that they were unmarried, and not within the forbidden degrees, they were required to bring a certificate signed by two householders or by an elder. Such a certificate, evidently falsified, is that now discovered. Banns had to be proclaimed on three successive Sundays. Under this condition, 16th September was the earliest date on which the poet might have had the blessing of the Church. A case before the law-courts in 1825 shows that the law in this matter was but loosely observed; and the Court of Session then declared to be clandestine a marriage following on a certificate of banns which had been issued by a parish clerk without any proclamation ever having been made, as was frequently the practice. This last may have been the mode of procedure in Shelley's case, and it seems unlikely that any marriage ceremony was ever performed. It is also more than probable that the certificate of proclamation which the clerk would issue to

Shelley was the 'marriage lines' which Harriet sent to her father.

On the other hand, an irregular marriage was simple enough. Wilkie Collins wrote his *Man and Wife* to show up the dangers of the Scottish marriage-law, which might lead two persons using a few cautious expressions into the bonds of matrimony. This is misleading, as marriage, regular or irregular, implies consent on both sides. The theory is that two persons have promised marriage to one another, who have afterwards lived as man and wife; and that they intend in this way to indicate that they have fulfilled or executed this promise. Where there is no other legal impediment it is sufficient for the man to say, 'I take you for my wife'; and if she assents and says, 'I take you for my husband,' and they really mean what they say, a marriage has been contracted.

The balance of evidence available seems to indicate that Shelley's Edinburgh marriage was a clandestine one, though it might, by the law of Scotland, be legally binding; and that no formal marriage ceremony, regular or irregular, ever took place.

OF ROYAL BLOOD.

A TALE OF THE SECRET SERVICE.

CHAPTER XVIII.—A VOICE IN THE NIGHT.



FORTNIGHT of hot, weary, and anxious days went by. The month of June was now drawing to a close, and every one was leaving the city for the country or the seaside.

I had met Mélanie many times at social functions, and we had greeted each other with all formality; but only once had we gone cycling together in the Bois. If I confess the truth, however, I must say that we did not then go very far, but spent the whole of the two happy hours sitting beneath the trees on that beautiful green hillside overlooking the lake; it was delightful in that bright morning sunlight—cool, fresh, and tranquil—after the city's turmoil. Each time we met her charm for me increased. She was so graceful, so utterly unaffected, so tender, so entirely happy, that I felt assured, notwithstanding all her modest hesitation, that she really and truly loved me. She was beautiful, too. Was not her portrait, by one of the well-known Paris photographers, reproduced in all sorts of English and foreign illustrated papers? Even her shabby cycling-skirt and straw hat could not disguise the fact that she was high-born; for on her face, when she was not actually in conversation with me, was that calm expression of hauteur which

noted pride and fearlessness of the world; but all her words to me were words of happiness and calm affection. True, she had only once allowed herself to confess her love, yet her actions betrayed the accuracy of my surmise. She loved me, and now spoke freely and without restraint of her daily life, of her relations, of her visits to the Court of her uncle the German Emperor, to the Czarina at St Petersburg, and to the popular Empress of Austria at Vienna. Her chatter was always merry, sometimes witty, and very frequently amusing. She had a keen sense of humour, and was altogether most engaging and bewitching. It was not because of her royal birth that I was held spell-bound; for on that morning of our first meeting, before I knew who she was, her loveliness and grace had attracted me. Now, as each day passed, I thought of her continually. She was my all, my hope, my very life.

Twice after our last meeting in the Bois I had seen her with her mother driving in the fine carriage with servants in the royal livery. Sitting there, dressed in the latest fashion, sweet and dainty, beneath her white silk sunshade, she looked indeed very unlike the shabby, dusty little figure who cycled at such early hours on that broad and well-kept road over which her carriage rolled daily at four o'clock.

It was close to the Porte de Namur, as I was

walking from the Legation to my own rooms farther up the leafy boulevard, that the equipage with its jingling harness passed me. I looked up quickly, and saw she had already recognised me. Then I raised my hat; and, while her proud mother glared at me askance through her *lorgnon*, the Princess bowed stiffly, as though I were a comparative stranger. But I was not surprised. Her mother was in ignorance of our clandestine meetings; and it was not to be supposed that the Princess would reveal our secret.

On the second occasion I met her driving in the Avenue de la Toison d'Or, accompanied by Princess Clementine, the daughter of the King; and then, free from all restraint, she smiled happily at me as she responded to my salute. I saw the ladies exchange some words; then both turned and looked back, Mélanie laughing again at me across her shoulder—an action which etiquette rules extremely undignified.

At the Legation matters had assumed a most critical phase. The intelligence which reached us daily from London was of a most disquieting character. England's attempted alliance with Germany and its failure, the secret of which had been instantly known to Russia and France, had produced a very embittered feeling towards us in all the Chancelleries of Europe, as we expected. This, combined with the fact that we had approached the King, in order that we might, if occasion demanded, pass through Belgium, and thus unite our military force with that of Germany, must, we knew, inevitably cause war. It was only a matter of weeks, or perhaps indeed days, and Europe would be shaken to her foundations by the startling announcement that the crisis had actually arrived, and that Russia and France had broken off diplomatic negotiations with the British Empire.

From the action of the Power which was our most deadly enemy, it was apparent that something unusual was taking place, yet all the combined efforts of our secret service department in the various capitals failed to obtain definite knowledge as to whether the stolen file of the King's correspondence had actually fallen into our enemies' hands. Some of the intelligence which reached us in cipher from Downing Street seemed to point undoubtedly to the fact that the tenor of the letters was known; while at other times, from the actions of the French Ministers in Rome and Berlin, it would seem that at Paris they still remained in ignorance.

One afternoon when Lady Drummond was receiving, as I was standing in the drawing-room chatting to a couple of ladies well known in Brussels society, one of the footmen whispered that a messenger from Downing Street had arrived and required a receipt for his despatches. Excusing myself, I went to my own room, and there found Graves in his light dust-coat, his hair a

trifle ruffled, and the thin blue ribbon of his official badge as Queen's foreign-service messenger escaping from beneath his cravat. This ribbon, with its medallion bearing the Queen's arms and the silver greyhound suspended, is always kept concealed beneath the messenger's cravat, and only exhibited when necessary to convince some railway official or Customs officer of the identity of its wearer; for it is a passport more potent than the usual formal blue document, signed by the Marquess of Macclesfield and bearing a sixpenny stamp.

'Well?' I said, gripping his hand. 'Once more in Brussels—eh?'

'Yes,' he responded, handing me the precious box while I signed his receipt. 'I haven't a moment to spare, for I've also got despatches for St Petersburg. I took the Vienna Express from Ostend to here, which gives me just an hour in Brussels. I shan't catch the North Express if I'm not sharp,' he added, glancing at his watch. 'You've discovered nothing of the theft, I suppose?'

'Nothing,' I responded. 'I can't imagine how it was done.'

'Neither can I,' he answered. 'Day by day I try to form some theory, but am utterly puzzled. Through all these years I've been carrying despatches I've never before lost one; and now, just within two years of gaining my pension, I have this misfortune. Somehow, I fear that the chief has lost confidence in me.'

'Why?' I inquired, rather surprised.

'Because I have more than a suspicion that I'm being shadowed by detectives. This makes me believe that the Marquess suspects me of selling those papers.'

'Selling them!' I echoed. 'My dear Graves, there's not a man in the service who doesn't trust you implicitly. There's no ground for suspicion against you whatever. If there was, I should know of it. Those men who are shadowing you are not detectives, you may rely upon it. They are more likely French agents who want to get at your despatches again.'

'If they try,' he answered determinedly, his mouth hard set—if they try, by Heaven, I'll give them a taste of this!' and he drew from his hip-pocket a good-sized, serviceable-looking revolver.

'Where are your despatches for St Petersburg?' I asked, noticing he had not a second box with him.

'In my belt. I have permission from the chief to carry them there. They are safer next my skin than in any sealed box;' and, rising, he rebuttoned his light overcoat and took up his soft felt hat. He was muscular, athletic, rather short of stature, dark-bearded, and thickly built, a typical specimen of the tough Englishman.

'Well, keep on the alert,' I said. 'The outlook is growing desperate ; therefore exercise the greatest care on your journeys.'

'Ah ! it's my carelessness that has caused all these strained relations,' he said in a dismal tone. 'I only blame myself, Mr Crawford. It is my fault ; yet how the theft was committed I'm utterly at a loss to know. The box was in my possession the whole time.'

'Not fault, Graves ; rather call it misfortune,' I answered. 'Some day we shall perhaps solve the mystery ; at least to that end I am daily working. Good-bye, and a pleasant journey.'

We shook hands, and as I stood at the window watching I saw him in his cab tearing down the Rue de la Loi to catch the North Express for St Petersburg.

Graves's life was, I reflected, one of constant unrest, all his days for years having been spent upon the great trunk-lines of Europe, until he had become an animated Bradshaw, and was on friendly terms with every Customs officer and sleeping-car conductor. During the time I had been in the service abroad I had constantly met him ; for he was the senior messenger, and if remaining for the night was always the guest of the Ambassador. Dozens of times he had come to Constantinople while I had been there ; and, in addition to his flying visits to the various Embassies and Legations in Europe, it was he who very frequently made the monthly journey from Downing Street to Teheran. In the messenger service the trip to Persia is looked upon as a pleasant change from the eternal journeys in Europe, for in Teheran there is usually a week or so of rest, while the long journey by road is welcome to one jaded by the eternal roar and rattle of the railway. Therefore, a journey to Persia is actually looked upon by a Queen's messenger as a relaxation !

While I stood at the window, however, Sir John, having learnt that despatches had arrived, entered hurriedly and unlocked and opened the box, while I obtained the decipher-book from the safe and began at once to transcribe the despatch he handed me. He overlooked me as I wrote letter after letter ; and when I had finished, and he learnt its purport, he sank into his chair with his brows knit and his eyes fixed in thought.

The despatch, when fully transcribed, read as follows :

'No. 6A, 3472.—*Private.*

'From MARQUESS OF MACCLESFIELD

To SIR JOHN DRUMMOND, Brussels.

'A telegraphic despatch dated midnight, 9th inst., from Rome, states that secret information has been obtained by our Embassy that the French Ambassador that day called upon the Italian Minister of Foreign Affairs and had an interview lasting two hours. The King was also present. The subject under discussion was

the possibility of Italy forming an offensive alliance with France against England. A council meeting is to be held on the 12th to discuss the matter. During the evening of the 9th the King received by special courier an autograph letter from the Czar. You are at liberty to inform His Majesty the King of the Belgians of this latest and most critical turn of events, and assure him of the continued friendliness and goodwill of Her Majesty's Government. Further information follows. Ciphers to be changed at midday on the 11th inst., from 222 to 186. End.'

'We are now within an ace of war,' the Ambassador observed gravely, with a sigh. 'The knowledge of our failure at Berlin has precipitated events in a most alarming manner. Never, Crawford, in the whole of my diplomatic career, has England been nearer war than she is at this moment.'

'And our lost despatches,' I observed—'what of them ?'

'I fear to think,' he answered gloomily. 'My hands are tied by uncertainty as to the parties into whose hands these letters have fallen. I can do nothing—absolutely nothing. It is strange that the secret service has failed to discover what is surreptitiously known of the contents of these papers, or into whose hands they have passed.'

'The theft was one of the most ingenious ever perpetrated by our enemies,' I remarked ; 'and no doubt those who could steal so cleverly also took every precaution to baffle us in our effort to trace them. But tell me,' I added, 'has the King mentioned to you the reason he desires to have an interview with that woman Judith Kohn ?'

'No,' answered my chief. 'I put to him a very pointed question, but he merely remarked that the matter was a private one. It is fortunate that we are upon such good terms with His Majesty, or the loss of his letters might have placed us in a most invidious position.'

'But he knows that, notwithstanding the neutrality he is compelled to preserve, Britain is the best friend and protector of his kingdom,' I said.

'Quite right, quite right,' Sir John replied. 'But we never know, Crawford, what advantages France may hold out to him. Remember, they can offer tempting baits to the unwary. You recollect the action of French diplomacy in Constantinople, and how Cambon twists the Sultan round his finger ?'

I nodded, for I well knew the marvellous astuteness and cunning of the French Ambassador to the Porte. 'Then you consider our position here is not so safe as it really appears ?'

'Certainly not,' he responded gloomily. 'If war were declared against England to-morrow, Belgium would be forced to take the side of

Germany or France, and our "open door" to Europe would be closed. The King would be compelled to accede, in order to save his crown and kingdom.'

"But the treaty of neutrality?" I suggested.

The Ambassador snapped his fingers impatiently. "In case of European war—and it means that and nothing else—treaties such as those would be set at naught. A little skirmishing between Uhlan's and Chasseurs along the Meuse valley, and the treaty would vanish into air. The King is a clever politician himself; and he knows that quite well. We should have, no doubt, secured an agreement with Belgium had it not been for the Minister De Bock's opposition. He is, as you know, in favour of an alliance with France."

"But he has been superseded now," I said.

"Yes; but unfortunately his successor holds exactly the same views. Brussels is always modelling itself upon Parisian fashions, and of course the minds of Belgians naturally turn to thoughts of France as their protector."

Then the Ambassador rose wearily, and, after the despatch had been filed, we went back to the drawing-room, where Lady Drummond was entertaining her crowd of chattering guests with that courtesy which characterised her as a polished and popular hostess.

There is a strange fate that sometimes directs our actions, and leads us to do things quite involuntarily. That same evening I accompanied Giffard and a friend of his, a Belgian deputy, to the theatre; and at the conclusion of the performance, it being a bright starlit night, I set out to walk to my rooms alone, refusing their invitation to go round to the English Club, as I felt a slight touch of fever on me. My head ached violently; but the cool air revived me, and I was walking along the wide and shady avenue which forms the Boulevard du Regent, one of the best residential quarters of the city, when suddenly in the obscurity before me I thought I distinguished the fluttering of something white.

It was past midnight; most of the gas-lamps had been extinguished, only a solitary light burning here and there; therefore, in the darkness, increased by the foliage of the trees, everything was obscured. No sound broke the quiet of the night save the rustling of the tree-tops as a gust of cool night-wind swept across them.

Yet I felt confident I had seen something, and that it had instantly disappeared. I had heard and read in the papers of belated foot-passengers being waylaid there; hence I resolved to keep my wits about me. In order to watch, I slipped quickly behind a tree-trunk and waited, my eyes fixed upon the spot where that flash of white had been revealed.

There was still no sound. At night in that wide thoroughfare, with its thick avenue, the foot-passenger was entirely alone. Most people, it is true, take the footpath along by the houses

lining the boulevard; and I knew that I had acted foolishly in walking where I did. Foot-pads are plentiful in the Brussels boulevards, and at night the police surveillance is not all that it might be.

Suddenly, however, I heard a quick, sharp cry—the cry of a woman in pain; and there, sure enough, I saw again the same flash of white. There were sounds of scuffling, then silence again, broken only by a low groan and a word of reproach.

I hesitated in wonder.

Of a sudden a shriek rang out upon the night air, and a woman's voice cried in French:

"Ah, no! Let me go! Let me go! Spare my life, and you shall have what you ask. You—you'll kill me, you coward! Let me go! Ah! you are hurting me! You"—and there was a strange, horrible sound, as though the woman were trying to speak, but the terrible pressure upon her throat only reduced her words to inarticulate sounds.

In an instant I dashed forward, reaching in a few paces two struggling figures—a man and a woman. Without a moment's hesitation, and entirely heedless of the consequences, I flung myself upon the man—a well-dressed fellow in silk hat and frock-coat—and, seizing his arms, dragged his sinewy, murderous hands from the woman's throat; for he had clutched her in a fierce grip, and was endeavouring to strangle her.

She shook herself free and drew back with a cry of relief; but in that instant, almost before I was aware of it, her assailant had closed with me, uttering a low cry of suppressed rage. So suddenly, indeed, did he spring upon me that I was nearly borne to earth; but in desperation I wrestled with him, managing to keep my footing and, by strategy learnt in my college days, to gain a slight advantage. Upon my cheek I could feel his hot breath as he panted with exertion, and could hear the sound of his teeth grinding hard in his desperate effort to cast me off, for I had now got him in my power. In swaying from side to side in that dark avenue we, however, suddenly emerged into a faint ray of light shed by one of the few street-lamps still alight; and then, for the first time, I caught a glimpse of his features. He was fair, with a blonde moustache; but his slightly pock-marked face was distorted by a fierce, unbridled anger. To the woman at the same instant my own features were apparently revealed, for with a wild exclamation she breathlessly ejaculated my name. That voice sounded familiar in my ears and startled me. I drew back amazed, and peered at the white-robed figure before me.

To me the face of that man I held within my grasp was the most hateful and detestable in all the world. This sudden encounter caused me to start in amazement, and in an instant

he had twisted himself free and stood glaring at me, as though ready to tear me limb from limb.

The woman who had been thus cowardly attacked was none other than Mélanie, my be-

loved ; her assailant was that degraded spy and traitor whom I had once hunted down and brought to punishment, the ex-captain of artillery, Oswald Krauss.

(To be continued.)

RIFLE CLUBS.

HOW TO ENCOURAGE GOOD MARKSMEN.

By JAMES TAYLOR.

HE present time, when we are engaged in war with a small but active antagonist, appears to be very suitable for drawing attention to a means whereby the armed strength of the nation might be very materially increased.

It is admitted by no less an authority than the Secretary of State for War that conscription is not only possible, but in certain eventualities extremely probable. From a personal and industrial point of view this is to be deprecated, except as the last resort : from a personal point of view as a hateful interference with the liberty of the subject ; and from an industrial point of view as tending to a disorganisation of our works and factories, and a further reduction of the supply of labour.

By way of premises, it will, I think, be acknowledged that the most formidable enemies for regular troops to encounter are those who can readily adapt themselves to a guerilla warfare ; and for this the principal elements of success are the possession of a good rifle and a thorough knowledge of its use. The newest subaltern of Volunteers would curl his moustache (if haply he has one) and smile disdainfully at the tactics and manœuvres of the Boer commandoes ; but a knowledge of their standard of skill in shooting will probably cause him to recommend his men, as I have known some Volunteer officers do, not to volunteer for foreign service in a body, but to enlist individually if the martial spirit moves them. In the one case their Volunteer officers would have to accompany them ; in the other they would not. I am not forgetting the few exceptions, the most prominent of whom are perhaps Sir Howard Vincent and the London Irish. With regard to their efficiency as shots I cannot do better than give the following extract from a newspaper report :

‘Referring again to the Home District, to which the volunteering Sir Howard Vincent belongs, and to the shooting of the Volunteers, the Commandant of the School of Musketry reports that 61 per cent. are only second-class shots, and of this number 40 per cent. are unacquainted with the sighting and shooting of their rifles at distances over two hundred yards. On reference

to the Musketry Return, it will be found that more than half the men Sir Howard Vincent offers to the authorities to fight the Boers are only second-class shots, and of the London Irish nearly 60 per cent. of the whole corps are but second-class shots.’ The Commandant of the School of Musketry adds : ‘Volunteers must therefore realise that, measured by the regular standards of this country or the Continent, they have still a great deal of leeway to make up before they can be credited as a body with the possession of even a moderate degree of efficiency in the use of their arms.’

An object-lesson showing the success of guerilla tactics which our military chiefs are not likely to forget very readily was shown in the recent fighting on the north-west frontier of India. To this again the Filipinos to a great extent owe the fact that our American cousins fought their last battle within easy distance of the spot where they commenced operations. The services of the Francs-tireurs in the Franco-Prussian war should not be forgotten.

That rifle-shooting in England has deteriorated—or, if it has not deteriorated, is sadly lacking in efficiency—is shown by the international competition which took place in Holland. Great Britain, France, Holland, Denmark, Switzerland, Norway, and Belgium were represented. Shots were fired standing, kneeling, and lying down, and the competitors had one hundred and twenty rounds of ammunition for each position. Where did Great Britain find herself ? Last but one among the teams ; and in the standing position a very bad last.

Coming from the general to the particular : there are a large number of able-bodied men untouched by the Volunteer movement, but imbued with the love of a gun, which, by the way, is generally one of the first toys of the infant of the male persuasion, the favourite medium of sport of the youth, and of moderate exercise and sport for those more advanced in years. Joining the Volunteers means an endless round of drill (which changes very considerably every few years), the care of uniform and accoutrements, compliance with many irksome and apparently meaningless regulations, and a week away from business every year. If you can

blend the love of sport and competition—inherent in the Anglo-Saxon mind—with patriotism, you will obtain a valuable asset, and in my opinion it can be done in the manner hereafter sketched, the result of which would be an addition to our home defence of many thousands of effective riflemen. The Boers have taught us that drill and Salisbury Plain manœuvres are not indispensable in the modern battle, but that good marksmanship is.

Under present conditions, if it is desired to form a rifle club, each member has to provide himself not only with a rifle but a gun-license as well. In addition, the club has to pay for the use of a range; and, where this is situated some distance away, expenses of travelling to and from the range form a large item. Each member has, of course, also to pay for his ammunition.

Now, it may be asked, assuming that a rifle club numbering, say, fifty members is formed, each of whom pays an annual subscription, why should not the War Office lend the rifles, and supply the ammunition up to a certain number of rounds at a nominal charge, or even free; of course subject to suitable conditions as to the percentage of efficient shots, care of and safe return of the rifles, &c., and under an agreement to serve for home defence if called upon? Surely there is nothing unreasonable in asking for this concession.

A scheme could also be drawn up within a day or two whereby the clubs or sections could be affiliated in the different regimental districts, and the rendezvous of each allotted, so that the mobilisation of this force could be easily and quickly effected. Many of the members would be in a position to provide a horse, and thus be available as mounted infantry; and no words are needed at the present juncture to show the value of this kind of force.

The few rifle clubs with which I am acquainted show that a large number of their members are composed of ex-Volunteers, men whose services at present are entirely lost to the country, and men who can well impart the necessary degree of military discipline, system, and organisation.

A spirit of conservatism seems to be predominant at the War Office. In order to ascertain the feeling there in regard to rifle clubs I wrote some time ago the following letter to that Government department—or, to be precise, to the Secretary of State for War:

'SIR,—Will you inform me whether, in the event of a rifle club being formed, consisting partly of civilians and partly of retired Volunteers, the whole numbering at least fifty, each of whom would hold a gun-license, and the club paying for the use of a suitable range, the War Office would lend, or hire, a certain number of rifles, subject to such conditions as they might think fit as to the number of efficient shots, care of and safe return of the rifles?' &c.

This was the reply, equally courteous and unsatisfactory:

'SIR,—I am directed by the Secretary of State for War to acknowledge the receipt of your letter of the 4th inst., and, in reply, to inform you with regret that your application cannot be complied with, as there are no Regulations under which such an issue can be made.—I have the honour to be,' &c.

(Signed) 'B. MONTGOMERY,
'For Inspector-General of Ordnance.'

I wonder who is the authority that makes the Regulations.

Of course, while there is no desire on the part of the War Office to encourage rifle clubs, one can hardly expect them to be taken to kindly by the officers of Volunteer regiments. Those to whom I have spoken are dead against it. They seem to have the idea that such clubs would detract from the Volunteer movement. It would be unkind to suggest that the fear that Volunteer marksmanship cannot hold its own against outside rivalry is the reason of the hostility.

So far from the movement which I advocate injuring volunteering, I believe that it would be beneficial. It would not only give men a greater love for the rifle, but it would bring them into closer touch with Volunteers, many of them would be more inclined after a little practice to join their local corps, we should get more rivalry and better marksmen, and 'old hands' after leaving the Volunteers would be enabled to maintain their efficiency by occasional practice at the range.

I have it on the authority of no less a man than Sir Redvers Buller that too much attention seems to be devoted to 'training in drill-halls'; and this, I am afraid, at the expense of good marksmanship.

We have now between two hundred thousand and three hundred thousand Volunteers, and I am convinced that if encouragement were given to the formation of rifle clubs at least another one hundred thousand men might be relied upon as making themselves efficient for defensive purposes.

It should be clearly understood that the views enunciated in this article are by no means inspired through any temporary excitement caused by the crisis in the Transvaal. It is a matter which has been thought over soberly; and I think it is obvious that if such a project were carried out it would be certain to prove of great value to the nation.

It is worthy of note that Lord Wolseley, in response to a correspondent who asks if his lordship is in accord with the rest of the Council of the National Rifle Association as to the desirability of encouraging the promotion of clubs to make rifle practice accessible to the general population, has replied that he has 'always taken a lively interest in this subject, and thinks it an important matter. He would gladly see the people

generally familiar with the use of the rifle, as their forefathers were with that of the long-bow. Skill in the use of arms cannot be acquired at short notice; and he believes that general rifle practice would be of great value, both to the people individually and to the resources of the country. He thinks it very desirable that the movement in this direction should be widely taken up and well supported.'

[Since this was written Lord Lansdowne, in reply

to a question in the House of Lords, said that the War Office was favourable to the principle of local ranges, and the enabling of Volunteers to obtain instruction; also, that it was intended to provide £100,000 for assisting local ranges. Lord Tweedmouth suggested that rifle clubs should be allowed to use these ranges at such times as they were not required by the Volunteers. At the last meeting of the National Rifle Association it was decided to encourage the formation of rifle clubs.]

PATRIOT AND TRAITOR.

By ALAN OSCAR.

THOUGH she had no great depth of character, yet the stress of the time had subdued her, as, indeed, it had subdued all over-emotional spirits. When the Hunt Ball was put off on account of the Tugela disaster, and because of young Ascot's death, it showed even the young women that war had its serious side; and now the Yeomanry had been called on! A month ago no one had dreamt of such a thing; yet here were young Danby, and Smith-Begg the farmer's son, with dozens of others she had known for years, actually going out! It seemed unbelievable. Fred Selby was going too; that brought the matter still closer to her; for, though she had never encouraged him, she knew—well, *what* did she know? Had she not known it before, his eyes during the last two days must have told her.

'He has no right to,' she thought. 'It is taking an advantage of his position;' and she began to fear being carried by storm in spite of herself. So that this afternoon, when young Leveson called, she failed to respond to his advances, and rebelled against the proprietary air he had taken with her lately. She even excused herself from playing his accompaniment to the song he was to sing at the War Fund Concert. But he would not notice her contrariety; and, sitting down at the piano, he sang 'My Queen' in his most abandoned style, throwing looks at her the while, which she refused to see.

'Come, Lil! Don't sulk,' he said at last.

This was too much for her; she rose with a vicious swish of her skirts and walked to the window.

'De—ar me!' he muttered.

'How is it *you* haven't volunteered, Mr Leveson?' she said at last. 'You hunt.'

'Yes; but it don't absolutely follow. Fact is, I'm too deep in business just now. All's fair, you know, in—er—well, never mind that. What I mean to say is, my firm have most important orders on hand, and I couldn't *possibly* go just now.'

'I think it's noble!' The trivial words brought a great lump into her throat, and she

had to stare hard out of the window to keep the tears in.

'Oh, yes, certainly. Wish awfully I could go. It's a splendid chance of seeing some fun; but, as I said, I positively *can't*.'

The measured beat of distant drums came on their ears, and both remembered that the militia were to march through the town to-day.

'Hang the music!' he muttered; and as she still stood at the window he hurriedly rose, and, flinging a 'Good-afternoon' behind him, left the house. It was as well; her feelings were surging up to the surface. As the little company passed beneath the window, and she saw Colonel Reade riding along with them, the dear old man who had been almost a second father to her, she burst into tears, and, flinging herself on the sofa, gave way to her emotion.

It was long after the shouting had died away—the blare of the trombones had gone, even the beat of drums had passed—that she rose.

'I *hate* him!' she exclaimed, and again the tears flowed over.

Lily Trevor was rich enough to be worth securing. She had—girl-like—been playing fast and loose among her lovers, of whom Leveson was one. He was partner in a business house at Cartref, the big shipping town fifteen miles away, and had a place at Helsdon, from whence he ran in to business on most days. He was reputed to be not far short of a millionaire, and was a good match for Miss Trevor.

Fred Selby followed somewhat at a distance, a 'devout lover.' He worshipped her; but she had hitherto somewhat ignored him. Yet his devotion touched her. Once or twice she had caught herself wishing he had more ardour for the attack; but she had let things slide, had not forbidden Leveson's proprietary airs, and was beginning to fancy herself his property.

'I suppose one *must* marry; and in these days it is absolutely necessary to have lots of money,' was her principal thought.

To-day her eyes had been opened, and she began to have a dim idea that money, after all,

was not worth the matrimonial plunge; though visions of old-maidhood did not appeal to her either. 'One *can't* get on in society unless one's married.'

Yet when Leveson did not come near her for a couple of days she missed him.

Selby, had he dared, would have called to make a farewell visit; but the Yeomanry volunteers were being drilled to death, and he could not get an afternoon, whilst he dared not come in the evening without an invitation.

So it came to pass that on the day the troop was to leave town she had allowed Leveson to invite her to lunch at a window-seat in the club, from whence, as he put it, 'they could see the whole show.' Had she overheard what had taken place that morning in the private room of Leveson, Shafskop, & Company's office she would not have accepted that invitation. But business is business in these days, even when it becomes treason.

Leveson and Shafskop were alone.

'Vel,' said Shafskop, 'we haf got der schip avay.'

'All clear?' asked Leveson.

'Yes. Left Antwerp dis morning. Ammunition all in hardware cases. Safe as houses!'

'That's good! And you think there's nothing to lead to her detention?'

'No. It has all been done clean and clever. Der cases was packed in Arnhem. Dere's nothing to give any one suspicion.'

'All right, then,' said Leveson. 'Let's hope they'll pass through safely and get to the right hands. Once they take delivery of them, I don't care if Lord Roberts gets 'em the next day. Anyway, they can't trace the shipment to us. We have accepted freight for general hardware—eh?'

'Ya! Dat is it.'

'Then *our* hands are clean.'

Shafskop chuckled.

Entirely ignorant of such things—ignorant, indeed, of all matters of business—Lily Trevor enjoyed her lunch and her company, for Leveson was well up in the society art of making himself agreeable; and nothing disturbed their equanimity till he slipped out an objectionable phrase. Perhaps this story had never been written had he kept his tongue under control; but he did not stand wine well, and a small bit of jealousy lurking in his soul prompted him.

'That cub Selby's going; I suppose you know? Instantly she fired up.

'He's not a cub! He's a brave man!'

'Oh, by Jove! Well—yes. I shouldn't have said that. They are *all* a good sort to go.'

'Ah, Mr Leveson! why didn't *you* go?'

'I! No fear! Why, I told you. I've got a cargo of ammunition on hand just now; we're shipping it for Delagoa. If it gets through I

shall make a clear thirty thousand. Those Dutchmen pay well.'

'What!'

Her face paled; she sickened.

He did not hear her gasping exclamation, or notice she had risen, for at the same moment the distant beat of the drums had caused him to step out on to the balcony. His remark had been forgotten as soon as uttered; it was only 'business' to him.

'Here they come, Lil!'

No answer. He turned. She was gone.

'Well, I'm— I say, waiter, where's Miss Trevor?'

'Just left the room, sir; seemed not quite well.'

'What's up, I wonder? Oh, well, she'll be back directly;' and again he looked up the street, where already he could hear the shouting of the people and the music of the march.

Meanwhile, in a tumult of feeling, Lily Trevor had rushed out into the street.

There came the Yeomanry riding four abreast, the crowds hysterically cheering; women—yes, and men—weeping unrestrainedly. She found herself crying and exclaiming with the rest.

Right abreast of her—in the market-place—they halted and dismounted; and ere she knew it a tall manly figure in khaki and top-boots stood in front of her. Through her tears she saw it was Selby.

It was a supreme moment for both. For him a moment of passionate love; for her—she could hardly have said. In such moments an emotional woman loses the mastery over herself. Afterwards, neither of them could have told what passed; but when the trumpets rang suddenly out, and Selby sprang to his horse, he held a tear-stained handkerchief.

That night when all was over she asked herself, 'What have I done?' and herself replied, 'I don't care! No! I *don't!*' Then, in utter revulsion, she shuddered at the thought of Leveson.

As the following days went by sinister reports began to circulate regarding Leveson. He found people looking suspiciously at him. Lily Trevor had cut him dead. Having forgotten that one observation he had let slip, he was somewhat at a loss to account for this; but he had an unpleasant suspicion that Shafskop or some one must have been indiscreet. Things became so uncomfortable that he shut up his place and went abroad to let it blow over.

A month later, in the official account of a skirmish outside Jagersfontein appeared the name, 'F. Selby, Imperial Yeomanry, severely wounded.'

Then, at last, she knew.

He is recovering. She is waiting the return of her hero.

THE MONTH: SCIENCE AND ARTS.

THE MOTOR-CAR IN WARFARE.



ACCORDING to *Feilden's Magazine*, our friend the enemy, who is giving us such a lesson in the value of mobility, is using two motor-vehicles in northern Natal for purposes of transport, from which speeds varying from fifteen to thirty miles an hour can be obtained. In addition to these, the Boers are stated to have ordered more vehicles from Germany and a number of motorcycles from France for scouting and despatch work. We are also informed that the French, German, and Austrian Governments have all taken steps with a view to the introduction of motor transport for army purposes; and that in the case of Germany trials have been made in the Hartz district by order of the Emperor, in which baggage-wagons, loaded up to two and a quarter tons, have been made to traverse ploughed fields and steep mountain-paths. These vehicles were fitted with benzine motors, and are said to have given satisfactory results. Our own military authorities are no doubt alive to the importance of this new departure in warfare, one of the many innovations which are working a complete revolution in the art.

MOTOR-WHEEL FOR VEHICLES.

There is no questioning the fact that the horseless carriage, or motor-car, has made great advances during the past year, and we may look forward to the time when vehicles of this description will be as common in our thoroughfares as the ubiquitous bicycle. What seems to be a great novelty in the industry is the introduction of a piece of apparatus called the motor-wheel, for which a patent has been granted to Mr J. W. Walters, of New York. It is somewhat like a bicycle front-wheel in that it works in a fork, the head of which turns in a socket; but it also comprises a two-cylinder gasoline motor and tanks for gasoline. The apparatus also has attached to it a fly-wheel, and is in reality a self-contained engine fitted to a wheel which can be readily connected to any existing vehicle. In the case of an ordinary four-wheel van, for example, the front ones would be removed and the motor-wheel fixed in their place, the steering being effected, not by a handle at the top of the fork as in the case of the bicycle, but by a hand-wheel with the help of shaft and gear-wheels. No reversing mechanism is necessary, the wheel being turned completely round in its socket when the vehicle to which it is attached is run backwards.

HOME-MADE WINDMILLS.

A most interesting series of elaborately illustrated articles have recently appeared in the

Scientific American (Supplement), entitled 'The Home-made Windmills of Nebraska,' by E. H. Barbour. It would seem that the farmers of Nebraska, led by some ingenious fellow, have made rough but efficient windmills, chiefly for pumping water, and that these are common all over the district. They are made of wood, mostly of any waste lumber that happens to be at hand; and some of them have cost less than ten shillings, and yet are doing valuable service in irrigation. These mills vary from one-man to eight or ten horse-power, the larger ones being employed for all purposes. Although they do not seem to have been used for the production of electricity, it is clear that in connection with a dynamo and accumulator, which latter could be charged in the daylight hours, these mills would do good service. The system is worthy the attention of all who live in country districts, despite the obvious disadvantage of wind-power—its inconstancy.

WIRELESS TELEGRAPHY.

Interest has been revived in this new method of communication by the discourse delivered at the Royal Institution by Signor Marconi, to whose labours so much of the success of the system is due. He stated that when returning from America he established an installation on board the *St Paul*; and by that means those on the ship received from the mainland, nearly seventy miles distant, all the recent war news while the vessel was running at twenty knots an hour. The news so received was printed and embodied in a paper called the *Transatlantic Times* several hours before the ship reached Southampton. The lecturer also said that the War Office had commissioned him to establish wireless telegraphic apparatus at the seat of war, and that stations were now ready at Modder River, Belmont, Orange River, and De Aar. These installations, under the care of his assistants, were working well, and would prove invaluable should at any time the Boers cut the ordinary field-lines.

IRREPRESSIBLE BACTERIA.

At a recent meeting of the Royal Society in London a paper was read which dealt with a remarkable investigation undertaken by Professor Dewar, Sir James Crichton-Brown, and Professor Macfadyen. The inquiry was held for the purpose of ascertaining the effect upon disease-causing microbes on immersion in liquid air. Liquid air, we may remind our readers, has a temperature which would be represented on Fahrenheit's thermometer by no less than three hundred and forty-four degrees of frost; and it might reasonably be supposed that no kind of life, animal or vegetable, could long exist in its near neighbour-

hood. It was found, however, that the hardy microbe was none the worse after twenty hours' immersion in the liquid. Certain photogenic or light-giving bacteria quenched their luminosity when placed in the liquid air, but resumed their customary radiance upon being removed and warmed to the normal temperature. Similar experiments are about to be carried out with liquid hydrogen, the temperature of which is considerably lower.

A SUSPENDED RAILWAY.

A novel kind of railroad is being constructed in Germany, between Barmen and Elberfeld, the inventor of the system being Herr Langen. The carriages, instead of resting on the rails in the usual way, hang from them, for the rails are fixed to girderwork at some height from the ground. Suspension railways have been designed before now, but never upon such an elaborate scale; and it remains to be seen whether the system possesses any advantages over ordinary railroad construction. The motive-power is electricity. It is said that the running of the vehicles is singularly smooth, and that extremely sharp curves can be negotiated without difficulty, the proof being that in a recent trial water placed in open vessels on the floor of one of the carriages was not spilt. We might point out that no system will prevent bodies moving outwards in rounding a curve. The tendency of vehicles to leave the metals is minimised on ordinary railways by making the outer rail of a curve higher than the inner one, a device which it would be difficult to adapt to a suspension railway such as that under consideration.

A MUSEUM OF FISH-CULTURE.

Our fisheries represent an industry of such immense importance to the whole community that there must be found hosts of sympathisers with the deputation which recently waited upon the Board of Trade respecting the continued maintenance of the Buckland Museum of Economic Fish-Culture at South Kensington. The late Frank Buckland, an ardent naturalist, and one of Her Majesty's Inspectors of Fisheries, formed this museum at his own expense, bequeathed it to the nation, and also set aside a sum of five thousand pounds to form a professorship of Economic Fish-Culture in connection with the scheme. The museum includes several casts and preparations made with Buckland's own hands; and, although it has of late years borne the appearance of neglect, there is much to interest and instruct the general public within its walls. The nation accepted the gift in 1881; but less than twenty years later the Select Committee dealing with the administration and cost of the scheme recommended that Buckland's foundation should be abolished. It may be that the Buckland Museum does not fulfil all the require-

ments that such an establishment, representing the fishing interests of such a great country as ours, should do; but it might form a nucleus for something better. At the closing ceremony of the Fisheries Exhibition in London in 1883, the Prince of Wales proposed the formation of a society having for its objects the collection of statistics and other information relative to fisheries, the diffusion among the fishing population of knowledge relative to their calling, and elucidation of natural history problems bearing upon the subject. The deputation which waited upon the Board of Trade quoted this suggestion, and urged upon the Government the desirability of maintaining the Buckland Museum as a permanent and necessary institution.

CHLOROFORM ADMINISTRATION.

The use of chloroform as an anaesthetic, one of the greatest boons to suffering humanity ever introduced, is not without its risks, as reports of inquests in the newspapers occasionally remind us. The proportion of fatalities to administrations of the drug is almost infinitesimal, but it exists; and, therefore, any improvement in the apparatus employed in the use of chloroform is a matter of interest. Dr George Flux, who has had much experience as an anaesthetist at different hospitals, has devised an instrument, which is described and figured in a recent number of the *Lancet*, that claims to possess advantages which tend to security of results. It consists of a metal cylinder stuffed with cotton wick, which is saturated with the volatile liquid. In connection with it is an india-rubber bulb, or bellows, which conveys the vapour to the mask which fits over the patient's mouth and nose. There is also a slot in the attached tube which can be partially opened when required, so that the chloroform vapour can be diluted with normal air in any proportion desired. The instrument can also be used for the administration of many other volatile vapours employed in the treatment of throat and chest affections.

LIGHTNING-STRUCK TREES.

The German Government has recently caused an inquiry to be made into the subject of lightning and its effect upon trees, the observations having been entrusted to the overseers of nine foresting stations scattered throughout an area of nearly fifty thousand acres in the district of Lippe. It was found that of all forest trees the oak was most susceptible to the attacks of lightning. The forests were found to comprise various kinds of trees in the following proportions: beech, 70 per cent.; oak, 11 per cent.; pine, 13 per cent.; and fir, 6 per cent. Of the two hundred and seventy-five trees which suffered from lightning during a period of several years, no fewer than 58 per cent. were oaks, 21 per cent. firs, 8 per cent. beeches, and 7 per cent.

pines. It is noteworthy that it has been stated by some English authorities that the beech is seldom or never struck by lightning. The truth of this statement has long been disproved, and it is interesting to see that the beech in Germany appears to be more often the subject of lightning-stroke than the pine.

FOOD PRODUCTS FROM FISH.

The American Fish Commission is reported to be carefully studying the methods in vogue at certain fish factories in northern Europe, with a view to the economical preparation of products from fish which hitherto Americans have regarded as useless. Among these is the preparation of fish-pastes from fish which have no commercial value either as fresh or salted food, but which at the same time possess a high nutritive value. It is said that the flesh of both the shark and the whale, which, of course, cannot properly be classified as a fish, are largely utilised for the preparation of a fish-extract which resembles in some particulars the popular extracts of beef, while they are far cheaper. All fishy flavour is eliminated by chemical process, and the extract is valuable for the foundation of soups and in general cookery. Whale-meat is very nutritious; but its excessive amount of fat renders it unpalatable to most people; and this is removed before the extract is boiled down to a syrupy consistence and sealed in jars. In many of the fish factories of Norway a 'fish meal' is made which is eaten extensively by the nations of northern Europe. In these several ways fish which formerly were never regarded as being fit for food are being utilised to the advantage of many.

THE SECRET OF LONGEVITY.

It is a common saying that 'annuitants never die'; but it is not generally known that there is some little foundation for the saying, and that persons in the receipt of an annuity actually do live for a considerable time longer than the average. In the report of the Friends' Provident Institution, just published, it is stated that the average age at death of the persons assured was sixty-six years and eight months. It must, however, be borne in mind that these were selected lives, all having undergone strict medical examination, and therefore the average length of life should be exceptional. That this is really the case is shown by the fact that the number of deaths which occurred amongst the assured was only eighty-two, whilst the number expected under the mortality tables was one hundred and forty-five. Allowing that the results given above appear to be exceptionally favourable, how are we to account for the extraordinary fact that the average age at death of those in receipt of annuities was seventy-nine years and four months—twelve years and eight months longer than the selected lives which were assured only? The matter is

still more extraordinary when we consider that the annuitants are not selected lives; they are not subject to medical examination, and all are taken indiscriminately without question. It cannot be that the unselected lives taken indiscriminately are better than selected ones. The only inference is, that the freedom from money-worries—or perhaps the comparative freedom—gives that ease and peace of mind which is conducive to longevity. The moral appears to be: if you want to live twelve years and eight months longer than the average, buy an annuity. It is, of course, well known that the members of the Society of Friends—or Quakers, as they are commonly called—are quiet, peaceful, and generally long-lived; but this should act on assured and annuitants alike. If other offices were to publish their experience it would probably be found that the rule is a universal one.

PROFESSOR JAMIESON ON CAPETOWN ELECTRIC TRAMWAYS AND CABLES.

At a meeting of the Institute of Engineers and Shipbuilders held in January last at Glasgow, Mr Andrew Jamieson, author of the well-known manual, *Steam and Steam-Engines*, and late Professor of Electrical Engineering in Glasgow Technical College, described the investigations and experiments he had carried out last autumn at Capetown. These were to ascertain the causes, effects, and remedies of the vexatious interferences to the receiving-signals coming through the submarine telegraph cable, which were created by the suddenly varying electric tramway currents.

With reference to these troublesome interferences, Professor Jamieson writes: 'The strength of current required to produce good readable signals on Lord Kelvin's siphon-recorder is only one-twentieth to one-thirtieth of a milliampère, whilst the currents sent from the tramway power-house to any one of the sections of the tramway lines is often ten million times this amount. These strong currents, after passing through the car motors, spread out for miles from the rails, and thus not only prevent delicate magnetic experiments being conducted at the Royal Observatory, but also find a return-path to the power-house along the heavy iron sheathing of the submarine cable, although the latter is at the bottom of Table Bay and at a considerable distance from the tramway lines. These erratic stray currents, in passing along the cable sheathing, induce correspondingly variable currents in the insulated cable conductor, and thus seriously interfere with the minute receiving-signal currents, producing "kicks," "vibrations," and "splashes" to such an extent as to prevent the most skilled telegraphists interpreting the messages during the working of the tramways.'

'The Eastern and South African Telegraph Company, to whom the cables belong, have spent considerable time and money in trying to over-

come these troubles. The only certain and efficacious remedy for these interferences is to be found in the laying down of a specially-made twisted twin-core anti-inductive shore-end.'

PRESENT AND FUTURE TELEGRAPH CABLE ROUTES
TO CAPE COLONY AND AUSTRALIA.

In Professor Jamieson's address to the Institute of Engineers and Shipbuilders, referred to above, he said that on examining a modern map of Europe and Africa it will be seen that there are two telegraph routes to the Cape from this country: the one (and the older route) he termed the Eastern and South African, and the other the West African. Both routes are worked by, and have their basis in, the first portion of the Eastern Telegraph Company's system. Messages for the Cape by the Eastern lines go from London *via* Porthewrnow, Lisbon, Gibraltar, Malta, Alexandria, Suez, and Aden, where they branch off down to Zanzibar, Mozambique, Delagoa Bay (Lorenzo Marques), and Durban. From thence they are transmitted by the Government land lines to Capetown, &c. The cables from Aden to Durban were laid in 1879, at the time of the Zulu war, and only one section thereof has since been duplicated—namely, that between Zanzibar and Mozambique, in 1885. The West Coast route returns to Great Britain *via* Mossamedes, Loanda, and many other places, such as Lagos, Bathurst, St Vincent, Madeira, and Lisbon.

With the view of providing additional security to submarine telegraphic communication between this country and South Africa, landing rights at Capetown have recently been obtained by the Eastern Telegraph Company from the Government for a third cable. The first section, from Capetown to St Helena, was completed on 26th November last year, and a further section to the island of Ascension on 16th December following. The third section to St Vincent was opened for use on 22nd February. It is further expected that this cable—by far the most direct—will be continued from Durban to Australia, touching at Mauritius, Cocos Islands, Perth (West Australia), and Adelaide (South Australia), when the cost of telegraphing to and from the Antipodes will thereby be considerably reduced.

A NEW INTERNAL-COMBUSTION ENGINE.

Mr Henry O'Connor, president of the Society of Engineers, in his recent inaugural address, reviewed the improvements in gas engineering and manufacture, and drew attention to a coal-dust burning internal-combustion engine invented by Mr P. F. M'Callum, of Helensburgh, Dumbartonshire, and experimentally tried on a small scale in Edinburgh. In working the experimental engine a volume of air is compressed by the up-stroke of the piston into the upper part of the combustion-cylinder. The proper quantity of coal-dust is then injected by a jet of high-pressure

air on to a wrought-iron plate attached by a stud to the piston, and maintained at a high temperature by the successive combustions. Immediately the first portion of the coal-dust strikes the plate ignition takes place, and a working-down stroke is made. When the piston reaches the bottom of its stroke the exhaust valve opens, allowing the combustion products and suspended ash to escape. A fresh charge of air then ascends through automatic valves from the crank chamber, and is compressed into the upper part of the cylinder in readiness for another combustion stroke, and so on. The force of the exhaust is amply sufficient to sweep out any solid matter which can possibly enter the engine through the fuel feeder. The engine is equally satisfactory when employed with oil. Working with coal-dust the engine gives diagrams of good and regular form, showing about fifteen horse-power at a speed of one hundred and fifty revolutions per minute, with a fuel consumption of about one and a half pound of coal-dust per horse-power an hour. Almost any kind of coal can be used, and the cost of pulverising is stated to be from sixpence to ninepence per ton. Professor Stanfield predicts that a larger engine of improved design will give a horse-power for a consumption of about half-a-pound of coal per hour.

A P R I L.

APRIL, with the pale-blue eye,
Came and took me by the hand;
Led me where the bluebells lie
In the hollows of the land;

Wept a moment with regret,
Laughed a moment for delight;
And the eyes that glistened wet
Still with sunny gleams were bright.

April—singing, laughing, crying—
Led my unreluctant feet
Where the violets are lying
In the hedgerows, shy and sweet.

If with hers mine eyes were weeping
For the Aprils passed away,
Soon with hers my joy comes leaping
For the April of to-day.

ARTHUR L. SALMON.

** TO CONTRIBUTORS.

1st. All communications should be addressed 'To the Editor, 339 High Street, Edinburgh.'

2nd. For its return in case of ineligibility, postage-stamps should accompany every manuscript.

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